What is claimed is:

A method of microwave-assisted protein array fabrication, comprising the steps of:
printing the proteins on a slide of aldehyde surface to produce a protein array,
immersing the protein array in PBSM (skim milk in PBS buffer, w/v 2%) for the blocking
reaction,

washing with PBST (Tween 20 in PBS buffer, w/w 0.025%),

rinsing with PBS buffer, and dry with centrifugation and proceed to the detection procedure or preserve by refrigeration;

which is characterized in that the printed array is immobilized by microwave irradiation, and accelerates the blocking reaction by microwave irradiation.

- 2. The method of claim 1, wherein the microwave intensity is 2.00 to 3.00 GHz.
- 3. The method of claim 1, wherein the immobilization time is 30 to 90 seconds.
- 4. The method of claim 1, wherein the time to accelerates the blocking reaction is 1 to 5 minutes.
- 5. The method of claim 1 being used in aldehyde surface slides, poly-L-lysine coated slides, epoxy coated slides, and FAST slides (SS, nitrocellulose).
- 6. The method of claim 1, wherein the proteins comprises antibody, antigen and substrates.
- 7. A full automatic protein array system, comprising:
- a computer control device, for setting the detection procedure, analyzing the scanning results and printing the report of the full automatic protein array system;

an encoding device, for providing bar codes on the slides by the setting of computer control device as for the management of detection results;

a refrigerator, for preserving the proteins such as antigen or antibody by the setting of computer control device;

a robotic arm, the printing procedure is set by the computer control device for getting the protein sample in the refrigerator and printing onto the encoding slides;

a microwave device, the microwave irradiation intensity and time is set by the computer control device for immobilizing the proteins on the slides and processing the blocking reaction;

a micro-injection device, the detection procedure is set by the computer control device for processing the washing, immuno-staining of antigen to antibody; and

a chip detection device, for scanning the result of the immuno-staining on the slides, and transfer the detection signal to the computer control device.